What Is Claimed:

1. A gas sensor comprising:

a housing, the housing defining first and second, substantially mirror image portions, the portions abut one another along a common plane and are open to one another; and

a gas inflow portal laterally located relative to portions.

2. A sensor as in claim 1 where the gas inflow portal is substantially perpendicular to the common plane.

3. A sensor as in claim 1 with the inflow portal symmetrically located relative to the common plane.

4. A sensor as in claim 1 which includes a gas outflow portal, displaced from the inflow portal by the portions and symmetrically located relative to the portions.

5. A sensor as in claim 2 which includes a filter which overlies the portions.

6. A sensor as in claim 5 where the filter substantially reduces fluid flow velocity in the portions.

7. A sensor as in claim 5 where, except for diffusion, the filter reduces velocity of ambient gases in the portions substantially to zero.

8. A sensor as in claim 1 where each of the portions includes a reflective member.

9. A sensor as in claim 8 where the reflective members are curved.

10. A sensor as in claim 1 which includes a radiant energy source.

11. A sensor as in claim 10 where the source is located on the common plane.

12. A sensor as in claim 11 which includes first and second sensing elements, one associated with each portion.

13. A sensor as in claim 12 with the elements carried by the housing, symmetrically located relative to the common plane.

14. A sensor as in claim 13 where the source directs radiant energy substantially symmetrically relative to the common plane and in a plane generally perpendicular thereto.

15. A sensor as in claim 9 where radiant energy crosses the portions with only a single reflection.

16. A sensor as in claim 14 where radiant energy crosses the portions with only a single reflection.

17. A chamber comprising:

a first sensing device and a second sensing device;

an emitter that transmits light;

a first concave reflective surface;

a second concave reflective surface;

the first sensing device receives at least some first light reflected from the first concave reflective surface and the second sensing device receives at least some second light reflected from the second concave reflective surface;

at least one gas entry opening;

where the at least one gas entry opening is positioned such that entering gas will enter into the first light and second light at substantially the same time.

18. A chamber comprising:

a first sensing device and a second sensing device;

an emitter device that transmits light;

a first concave reflective surface;

a second concave reflective surface;

the first sensing device receives at least some first light reflected from the first concave reflective surface and the said second sensing device receives at least some second light reflected from the said second concave reflective surface;

at least one gas entry opening;

where the at least one gas entry opening is located such that the gas entering the chamber will reach both the first concave reflective surface and the second concave reflective surface at substantially the same time.

19. A chamber comprising:

a first sensing device and a second sensing device;

an emitter that transmits light;

a first concave reflective surface;

a second concave reflective surface;

the first sensing device receives at last some first light reflected from the first concave reflective surface and the second sensing device receives at least some second light reflected from the second concave reflective surface;

at least one gas entry opening;

where the at least one gas entry opening is positioned in the chamber such that water in the gas entering the chamber will condense substantially equally on both the first concave reflective surface and the said second concave reflective surface at substantially the same time.

20. A chamber as in claim 19 wherein the first concave reflective surface is substantially identical to the second concave reflective surface.

21. A chamber as in claims 19 where the at least one gas entry opening is covered with filter material to excluded dust.

22. A chamber as in claim 19 where the first light and second light are substantially the same.

23. A chamber as in claim 22 where the first light and the second light vary by substantially the same amount due to water condensing on both concave reflective surfaces.

24. A folded beam, gas sensing chamber comprising:

at least one curved reflective surface;

an emitter; and

at least one sensor of emitted light reflected just once; and

first and second optical filters for producing a gas related radiant energy beam and a reference beam.

25. A chamber as in claim 24 with a housing that has first and second mirror image regions, respectively, a sensing region and a reference region.

26. A chamber as in claim 25 where gas to be sensed flows into both regions substantially simultaneously.

27. A gas detector comprising:

a first sensing device and a second sensing device;

an emitter;

at least a first reflective surface that reflects at least first light rays from the emitter, a portion of said first light rays are received by a first sensing device;

at least a second reflective surface that reflects at least second light rays from the emitter, a portion of second light rays are received by a second sensing device;

where the at least first and second reflective surfaces are substantially a mirror image of one another relative to a common plane; and

at least one gas entry opening.

28. A gas detector as in claim 27 where the first sensing device senses a predetermined gas.

29. A gas detector as in claim 27 where the second sensing device senses a different gas than the first sensing device.

30. A gas detector as in claim 29 where the second sensing device comprises a reference device for compensating the first sensing device.

31. A gas detector as in claim 27 where the reflective surfaces focus at least portions of the light from the emitter to the sensing devices.

32. A gas detector as in claim 27 wherein the reflective surfaces are formed of gold or chrome.

33. A gas detector as in claim 27 where the two reflective surfaces are separate parts that are assembled to form the reflective surfaces within the chamber.

34. A gas detector as in claim 27 where the reflective surfaces are integrally formed.

35. A gas detector as in claim 27 where the gas entry opening includes a filter to exclude contaminants.

36. A gas detector as in claim 27 where the chamber has more than one gas entry opening.

37. A gas detector as in claim 27 where the chamber parts are constructed of plastic.

38. A gas detector as in claim 27 where the reflective surfaces are coated with a material to prevent degrading of the reflectivity.

39. A gas detector as in claim 27 where the first and second sensing devices are on opposite sides of the emitter.

40. A gas detector as in claim 27 where the first and second sensing devices have at least partly surrounding light collectors to increase the light rays focused thereon.

41. A gas detector as in claim 27 where the light collectors are reflectors.

42. A gas detector as in claim 27 where the light collectors are lenses.

43. A gas detector as in claim 27 where at least one of the emitter, first sensing device, or second sensing device has a lens to focus light.

44. A gas detector as in claim 27 where the emitter has a reflector around at least a portion of it to focus light.

45. A gas detector comprising:

a housing;

control circuits carried by the housing;

a diffusion chamber, carried by the housing, the chamber having sensing and reference portions;

a reflector symmetrically located relative to the portions;

a gas inflow port, on the housing, oriented to enable inflowing ambient gas to diffuse substantially symmetrically into the portions.

46. A detector as in claim 45 where the control circuits include executable instructions to compensate for undesired gas born contaminants.

47. A detector as in claim 46 with the contaminants comprising water vapor.

48. A detector as in claim 45 with the portions open to one another along a common plane.

49. A detector as in claim 48 where the inflow port is symmetrically located relative to the common plane.

50. A detector as in claim 48 where the inflowing gas moves in a direction generally parallel to the common plane.

51. A detector as in claim 50 which includes radiant energy beams that extend generally perpendicular to the common plane.

52. A detector as in claim 51 where the beams each exhibit a single reflection.

53. A detector a in claim 52 with a first beam extending across and reflected in one portion with a second beam extending across and reflected in the other portion.

54. A detector as in claim 45 where the sensing and reference portions are symmetrical.

55. A method comprising:

providing inflowing gas sensing and reference regions at the same time;

enabling the gas to diffuse between the regions across a common plane;

projecting a sensing beam across the sensing region;

projecting a reference beam across the reference region;

sensing selected wavelengths in the beams subsequent to transversing the regions; and

establishing a concentration of a selected constituent of the gas.

56. A method as in claim 55 which includes reflecting the beams across the respective region.

57. A method as in claim 55 where the beams are projected from a common location.

58. A method as in claim 55 where the beams are sensed at two different locations.

59. A method as in claim 58 where the beams are each filtered prior to being sensed.